

REMARKS

This is in response to the Office Action mailed April 8, 2008 in which claims 1-10 were rejected. With this amendment, claims 1, 7, and 9-10 are amended, claims 3-4 are canceled without prejudice or disclaimer, and new claims 11 and 12 are added. All amendments and new claims are fully supported by the original specification and drawings. No new matter is added. Claims 1-2 and 5-12 are pending in this application. In light of the foregoing amendments and following remarks, Applicant respectfully requests advancement of this application to allowance.

A. Interview Summary:

A telephonic examiner interview was held on August 6, 2008 between Attorneys Brian H. Batzli (Reg. No. 32,960), Benjamin A. Tramm (Reg. No. 62,303), Examiner Lawrence Laryea, and Examiner Eric Winakur. During the interview, proposed amendments to claims 1, 3, 4, 7 and 8 were discussed as well as the Gould reference (U.S. Patent No. 5,546,943). Applicant agreed to submit an Amendment and Response. No final agreement was reached.

B. Claim Rejections – 35 U.S.C. §102:

In the Office Action, claims 1, 2, and 7 were rejected under 35 U.S.C. §102(e) as being anticipated by Fazioli (U.S. Patent No. 6,527,722). Applicant respectfully traverses the rejection. However, in an effort to advance this application to allowance, claims 1 and 7 are amended.

Some embodiments relate to audio spatialization of an audio blood flow signal. An example is described in the specification of the pending application at page 6, lines 3-9.

1. Claim 1 and 2

Claim 1 is directed to a portable apparatus for conveying blood flow parameters to a user. The apparatus comprises, in part, a processing unit, “wherein said processing unit performs audio spatialisation of said audio blood flow signal to provide a spatialized audio blood flow signal; wherein said audio spatialisation includes spatial separation of information in accordance with the depth of the received signal from the said transducer device,” as recited in claim 1.

The Office Action acknowledges that Fazioli does not teach audio spatialisation (page 3 of the Action). Therefore, the rejection of claim 1 under 35 U.S.C. § 102(e) should be withdrawn.

Furthermore, claim 1 is not obvious in view of Gould (U.S. Patent No. 5,546,943). To supply the deficiency of Fazioli (when addressing prior claims 3 and 4), the Office Action cites to Gould, and specifically column 7, line 32 and column 8, lines 24-32 of Gould. Gould states that “. . . the invention utilizes three-dimensional audio spatialization sound processing. Such sound processing uses phase information and digital signal processing to give the listener the sensation that a sound is coming from a particular point in space relative to the listener.”

Gould, however, fails to disclose or suggest a processing unit that performs audio spatialisation of said audio blood flow signal to provide a spatialized audio blood flow signal; wherein said audio spatialisation includes spatial separation of information in accordance with the depth of the received signal from said transducer device.

Teigman (U.S. Patent No. 6,506,157) also fails to supply the deficiencies of Fazioli and Gould. Reconsideration and allowance of claim 1, and dependent claim 2 that depends therefrom, are respectfully requested.

2. Claims 7

Claim 7 is directed to a method of transmission of information of blood flow characteristics within a patient to a user. The method includes, in part, “simultaneously providing an audible form of a spatialised audio signal through at least one two audio emission devices to the ears of said user; wherein said spatialised audio blood flow signal is indicative of the of the depth of blood flowing associated with said provided Continuous Wave (CW) Doppler blood flow signal received from a transducer device.”

The Office Action acknowledges that Fazioli does not teach audio spatialisation (page 3 of the Action). Therefore, the rejection of claim 7 under 35 U.S.C. § 102(e) should be withdrawn.

Further, claim 7 is not obvious in view of Gould. Gould fails to disclose or suggest “simultaneously providing an audible form of a spatialised audio signal through at least one two audio emission devices to the ears of said user; wherein said spatialised audio blood flow signal is indicative of the depth of blood flowing associated with said provided Continuous Wave (CW) Doppler blood flow signal received from a transducer device,” as recited in claim 7.

Teigman also fails to supply the deficiencies of Fazioli and Gould. Reconsideration and allowance of claim 7, is respectfully requested.

C. Claim Rejections – 35 U.S.C. §103:

1. Claims 3-4 and 8-10

In the Office Action, claims 3-4 and 8-10 were rejected under 35 U.S.C. §103(a) as being obvious over Fazioli, in view of Teigman, and further in view of Gould. Applicant respectfully traverses the rejection. However, in an effort to advance this application to allowance, claims 9 and 10 are amended, and claims 3-4 are canceled without prejudice or disclaimer.

Claims 3-4 are canceled. Therefore, the rejection of claims 3-4 is now moot. Withdrawal of the rejection is requested.

Claim 8 depends from claim 7 discussed above. Therefore, reconsideration and allowance of claim 8 is requested.

Claim 9 is directed to a portable apparatus for conveying blood flow parameters to a user. The claim recites, in part, a processing unit interconnected to said transducer unit and adapted to extract a blood flow signal from the operation of said transducer, to process said blood flow signal so as to produce a video blood flow signal and an audio blood flow signal, and to perform substantially real-time audio spatialisation of said audio blood flow signal to produce a spatialized audio blood flow signal.

Claim 10 is directed to a method of transmission of information of blood flow characteristics within a patient to a user. The method includes, in part, simultaneously providing

a substantially real-time spatialised audio output to said user wherein said audio output is indicative of the Continuous Wave (CW) Doppler blood flow signal.

Fazioli, Teigman, and Gould all fail to teach or suggest substantially real-time audio spatialisation or simultaneously providing a substantially real-time spatialised audio output of a blood flow signal as recited in claims 9 and 10, respectively. Reconsideration and allowance of claims 9-10 are respectfully requested.

2. Claims 5-6

In the Office Action, claims 5 and 6 were rejected under 35 U.S.C. §103(a) as being obvious over Fazioli in view of Raines (U.S. Patent No. 6,149,587). Applicant respectfully traverses the rejection. Further, claims 5 and 6 ultimately depend from claim 1, discussed above. Reconsideration and allowance of claims 5 and 6 are respectfully requested.

D. New Claims:

With this Amendment, claims 11 and 12 are added. Claim 11 depends from claim 1 and claim 12 depends from claim 7. Claims 1 and 7 are discussed above. Reconsideration and allowance of claims 11 and 12 are respectfully requested.

Conclusion

In view of this Amendment and Response, Applicant respectfully requests a Notice of Allowance. There may be additional reasons that the pending subject matter is patentably distinct from the cited references in addition to those discussed herein. Applicant reserves the right to raise any such arguments in the future. If the Examiner believes that a telephone conference would advance the prosecution of the application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date:

8 September 2008

By:

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